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10/758,643	01/15/2004	KahHing Ting	STL11217	5810

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Seagate Technology LLC  
Intellectual Property  
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EXAMINER

STACE, BRENT S

ART UNIT PAPER NUMBER

2161

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/758,643

Applicant(s)

TING ET AL.

Examiner

Brent S. Stace

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/15/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Remarks***

1. Claims 1-20 have been examined. Claims 1-20 have been rejected. This document is the first Office action on the merits.

### ***Information Disclosure Statement***

2. The reference on the IDS on page 2 identified by U.S. Patent No. 6,207,022 appears to be a typo since the reference deals with purification of crude (meth) acrylic acid and the publication data and name on the IDS do not match the U.S. Patent document matching U.S. Patent No. 6,207,022.

### ***Drawings***

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "190" has been used to designate both "MEM" in Fig. 6 and a line in Fig. 7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

5. Claims 13 and 20 are objected to because of the following informalities:
- a. Claim 13 recites "the memory space" on line 2. At this point in the claims there have been three memory spaces established. It is unclear which memory space this is referring to.
  - b. Claim 20 is not grouped together with the claim or claims to which they refer to the extent practicable. See MPEP § 608.01(m) and 37 C.F.R. 1.75(g).

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

Art Unit: 2161

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 20 recites the limitation "the query engine" in line 1. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,857,180 (Hallmark et al.).

**Claim 1** can be mapped to Hallmark as follows: "A method for querying a computerized database, [Hallmark, col. 5, lines 10-15] comprising:

- distributing a desired range of data values to be obtained from the database across a plurality of different query statements; [Hallmark, col. 5, lines 10-15 with Hallmark, col. 6, lines 20-33 with Hallmark, col. 8, lines 12-16]

- simultaneously executing the plurality of query statements to access said database and transfer associated data subsets into a memory space; [Hallmark, col. 5, lines 10-15 with Hallmark, col. 6, lines 20-33] and
- arranging the associated data subsets to form the desired range of data values” [Hallmark, col. 6, lines 20-33 with Hallmark, col. 5, lines 22-34].

**Claim 2** can be mapped to Hallmark as follows: “The method of claim 1, wherein the computerized database comprises a distributed database portions of which are stored in different locations linked by a computer network” [Hallmark, Figs. 1A-1D with Hallmark, col. 7, lines 19-23 with Hallmark, col. 7, lines 41-44].

**Claim 3** can be mapped to Hallmark as follows: “The method of claim 1, further comprising exporting the desired range of data values obtained from the arranging step to a second memory space” [Hallmark, col. 5, lines 20-33 with Hallmark, col. 6, lines 20-33].

**Claim 4** can be mapped to Hallmark as follows: “The method of claim 1, further comprising using an analysis routine to analyze the desired range of data values” [Hallmark, col. 1, lines 20-22 with Hallmark, col. 8, lines 12-34].

**Claim 5** can be mapped to Hallmark as follows: “The method of claim 1, wherein at least one query statement retrieves data values from the database for a selected data field type, and wherein at least one other query statement retrieves data values from the data base for the selected data field type” [Hallmark, col. 5, lines 20-33 with Hallmark, col. 6, lines 20-33].

**Claim 11** can be mapped to Hallmark as follows: "A computer system, [Hallmark, Figs. 1A-1D with Hallmark, col. 7, lines 41-44] comprising:

- a database stored in a first memory space and accessible by a computer; [Hallmark, col. 7, lines 41-44 with Hallmark, col. 5, lines 23-34] and
- a query engine stored in a second memory space which, upon execution," [Hallmark, col. 5, lines 34-44].

The remainder of Claim 11 encompasses substantially the same scope of the invention as that of Claim 1, in addition to a computer system and some elements for performing the method steps of Claim 1. Therefore, Claim 11 is rejected for the same reasons as stated above with respect to Claim 1.

**Claim 12** can be mapped to Hallmark as follows: "The computer system of claim 11, wherein the computer comprises a server computer, wherein the computer system further comprises a client computer associated with the server computer over a computer network, and wherein the client computer executes the query engine" [Hallmark, Figs. 1A-1D with Hallmark, col. 7, lines 19-23 with Hallmark, col. 7, lines 41-44 with Hallmark, col. 5, lines 23-44].

**Claim 13** can be mapped to Hallmark as follows: "The computer system of claim 11, wherein the database comprises a distributed database so that the memory space comprises a plurality of different locations linked by a computer network" [Hallmark, Figs. 1A-1D with Hallmark, col. 7, lines 19-23 with Hallmark, col. 7, lines 41-44].

**Claim 14** can be mapped to Hallmark as follows: "The computer system of claim 11, wherein the query engine subsequently exports the desired range of data values to a fourth memory space" [mark, col. 5, lines 20-33 with Hallmark, col. 6, lines 20-33].

**Claim 15** encompasses substantially the same scope of the invention as that of Claim 4, in addition to a computer system and some elements for performing the method steps of Claim 4. Therefore, Claim 15 is rejected for the same reasons as stated above with respect to Claim 4.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).



13. Claims 6, 7, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,857,180 (Hallmark et al.) in view of U.S. Patent No. 6,011,758 (Dockes et al.).

For **Claim 6**, Hallmark teaches: "The method of claim 1, wherein the desired range of data values comprises."

Hallmark discloses the above limitation but does not expressly teach: "manufacturing data associated with manufacture of a population of products."

With respect to Claim 6, an analogous art, Dockes, teaches: "manufacturing data associated with manufacture of a population of products" [Dockes, col. 7, lines 12-16 with Dockes, col. 16, lines 15-19 with Dockes, col. 19, lines 12-23].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Dockes with Hallmark because both inventions are directed towards using databases in a client/server fashion.

Dockes's invention would have been expected to successfully work well with Hallmark's invention because both inventions use databases. Hallmark discloses a method and apparatus for implementing parallel operations in a database management system comprising query processing on a distributed/parallel, partitioned database, however Hallmark does not expressly disclose the specific use of the database for manufacturing data or that the manufacturing data relates to data storage devices. Dockes discloses a system and method for production of compact discs on demand comprising writing CD's using a database of orders.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the specific use (manufacturing CD's/storage devices) and the manufacturing data from Dockes and install it into the invention of Hallmark, thereby offering the obvious advantage of being able to use Hallmark's invention for a data processing system that writes CD's for requesting users so they may obtain the CD requested in Dockes.

**Claim 7** can be mapped to Hallmark (as modified by Dockes) as follows: "The method of claim 6, wherein the products comprise data storage devices" [Dockes, col. 7, lines 12-16 with Dockes, col. 19, lines 12-23].

**Claims 16 and 17** encompass substantially the same scope of the invention as that of Claims 6 and 7, respectfully, in addition to a computer system and some elements for performing the method steps of Claims 6 and 7, respectfully. Therefore, Claims 16 and 17 are rejected for the same reasons as stated above with respect to Claims 6 and 7, respectfully.

14. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,857,180 (Hallmark et al.) in view of U.S. Patent No. 6,011,758 (Dockes et al.), further in view of "Man: Crontab(5)" (Crontab).

For **Claim 10**, Hallmark teaches: "The method of claim 1, wherein the distributing, simultaneously executing and arranging steps."

Hallmark discloses the above limitation but does not expressly teach: “are carried out on a repetitive, daily basis to obtain data relating to an ongoing manufacturing process.”

With respect to Claim 10, an analogous art, Crontab, teaches: “daily basis” [Crontab, page 3, from the top through “Example Cron File”].

With respect to Claim 10, an analogous art, Dockes, teaches: “are carried out on a repetitive, to obtain data relating to an ongoing manufacturing process” [Dockes, col. 7, lines 10-16 with Dockes, col. 9, lines 9-13 with Dockes, col. 16, lines 15-19 with Dockes, col. 19, lines 12-23].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Dockes and Crontab with Hallmark because the inventions are directed towards using computers.

Dockes's and Crontab invention would have been expected to successfully work well with Hallmark's invention because the inventions use computers. Hallmark discloses a method and apparatus for implementing parallel operations in a database management system comprising query processing on a distributed/parallel, partitioned database, however Hallmark does not expressly disclose the specific use of the database for a manufacturing process. Dockes discloses a system and method for production of compact discs on demand comprising writing CD's using a database of orders. Crontab discloses a computer command for daily repetitive execution of a command comprising the ability to execute a command on a daily basis.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the specific use (manufacturing CD's/storage devices) from Dockes and the crontab command from Crontab and install them into the invention of Hallmark, thereby offering the obvious advantage of being able to use Hallmark's invention for a data processing system that writes CD's for requesting users so they may obtain the CD requested in Dockes. The execution of getting an order from the database and making a job file from it would then be done on at least a daily basis to keep the job spooling directory relatively full at all times so that there is always at least one job ready for dispatch. This makes the autonomous system of Dockes more efficient.

**Claim 20's** limitation(s) have already been met by Claim 10's limitation(s). Therefore, Claim 20 is rejected for the same reason(s) as stated above with respect to Claim 10.

15. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,857,180 (Hallmark et al.) in view of U.S. Patent No. 6,701,345 (Carley et al.).

For **Claim 8**, Hallmark teaches: "The method of claim 1, wherein the simultaneously executing step comprises."

Hallmark discloses the above limitation but does not expressly teach: "logging into a computer network associated with the database under a different login account for each query statement so that each query statement is simultaneously executed using the associated login account."

With respect to Claim 8, an analogous art, Carley, teaches:

- “logging into a computer network associated with the database under a different login account for each query statement so that each query statement is simultaneously executed using the associated login account” [Carley, col. 130, lines 42-47].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Carley with Hallmark because both inventions are directed towards using data in databases.

Carley's invention would have been expected to successfully work well with Hallmark's invention because both inventions use databases on computers. Hallmark discloses a method and apparatus for implementing parallel operations in a database management system comprising query processing on a distributed/parallel, partitioned database, however Hallmark does not expressly disclose database security features. Carley discloses providing a notification when a plurality of users are altering similar data in a health care solution environment comprising the capability of implementing single logon or not (determined by product considerations).

It would have been obvious to one of ordinary skill in the art at the time of invention to take the non-single logon from Carley and install it into the invention of Hallmark, thereby offering the obvious advantage of using a simple method of allowing access to a subset of resources and establishing roles/permissions easily for the authority required.

**Claim 18** encompasses substantially the same scope of the invention as that of Claim 8, in addition to a computer system and some elements for performing the method steps of Claim 8. Therefore, Claim 18 is rejected for the same reasons as stated above with respect to Claim 8.

16. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,857,180 (Hallmark et al.) in view of U.S. Patent No. 6,701,345 (Carley et al.), further in view of U.S. Patent Application Publication No. 2002/0062310 (Marmor et al.).

For **Claim 9**, Hallmark (as modified by Carley) teaches: "The method of claim 8, wherein the simultaneously executing step further comprises."

Hallmark (as modified by Carley) discloses the above limitation but does not expressly teach: "initiating an auto-brake function that limits input/output transfer elapsed time by a server associated with the computer network and the database to a maximum value during execution of a selected one of the plurality of query statements."

With respect to Claim 9, an analogous art, Marmor, teaches: "initiating an auto-brake function that limits input/output transfer elapsed time by a server associated with the computer network and the database to a maximum value during execution of a selected one of the plurality of query statements" [Marmor, paragraph [0031]].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Marmor with Hallmark (as modified by Carley) because both inventions are directed towards querying database(s).

Marmor's invention would have been expected to successfully work well with Hallmark (as modified by Carley)'s invention because both inventions use databases on computers. Hallmark (as modified by Carley) discloses a method and apparatus for implementing parallel operations in a database management system comprising query processing on a distributed/parallel, partitioned database, however Hallmark (as modified by Carley) does not expressly disclose limiting I/O transfer elapsed time. Marmor discloses a peer-to-peer commerce system comprising a TTL query packet.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the TTL from Marmor and install it into the invention of Hallmark (as modified by Carley), thereby offering the obvious advantage of not having immortal query packets thereby speeding up the system by limiting how long I/O is sent by the elimination of old query packets.

**Claim 19** encompasses substantially the same scope of the invention as that of Claim 9, in addition to a computer system and some elements for performing the method steps of Claim 9. Therefore, Claim 19 is rejected for the same reasons as stated above with respect to Claim 9.

**Conclusion**

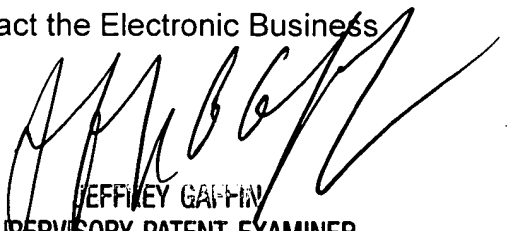
17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is advised that, although not used in the rejections above, prior art cited on the PTO-892 form and not relied upon is considered materially relevant to the applicant's claimed invention and/or portions of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent S. Stace whose telephone number is 571-272-8372 and fax number is 571-273-8372. The examiner can normally be reached on M-F 9am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brent Stace

*Cy*

  
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